The (Lack of) Boundaries of Small Business

Jacelly Cespedes (University of Minnesota) and Carlos Parra (PUC-Chile)

Research Proposal

Small businesses are prevalent in the U.S. and employ 47.5% of the private workforce (Decker et al., 2014). In addition, 80% of businesses are owner-operated (2016 Statistics of U.S. Businesses (SUSB)). Furthermore, the Covid-19 crisis and the programs introduced to subside small businesses (e.g., PPP provided $669 billion to small businesses in loans and cash grants) have further shown the importance of understanding these owner-operated businesses. However, despite the importance of these types of firms, there is little credible evidence for small private companies in the U.S. to questions such as how do small businesses respond in their financing choices to business shocks (e.g., cash flow shocks)? Who takes on the debt, the owner or business? Is the response different in recessions? Does the type of business entity (e.g., sole proprietorship, LLC) matter?

In addition, since the seminal work of Coase (1937), extensive theoretical literature has analyzed the determinants and consequences of firm boundaries (e.g., Williamson (1975), Grossman and Hart (1986), Holmstrom and Milgrom (1991)). However, less attention has been devoted to small businesses. In particular, since most businesses are owner-operated, an important question is to understand the boundaries of small businesses, for example, how are owners' and businesses' finances interrelated.

In this project, we study the boundaries of small businesses by looking at how the small businesses and their owners' finance decisions are connected by estimating their responses to cash windfalls on their liabilities and assets (e.g., real state).

To provide credible estimates to these questions, we need plausible exogenous variation in cash flow shocks to the business. Second, we need data on the small business, their owners, and their respective balance sheets.

First, in our research design, we exploit the bonuses that retailers earn when selling jackpot-winning lottery tickets (Cespedes et al. (2021)). To incentivize retailers to sell lottery tickets, state lottery programs provide bonuses to retailers that sell jackpot tickets (i.e., prizes of at least $40 million), usually as a percentage of the jackpot prize. Thus, the setting provides quasi-experimental variations in winning ticket bonuses of $150,000 on average. The empirical design exploits the fact that conditional on selling a winning jackpot, the amount of the retailer's bonus is randomly assigned. This variation will allow us to identify how the liabilities and the assets of these businesses and their owners change depending on the treatment intensity.

Second, concerning the data challenges, we hand-collect information on all retailers that sold winning Powerball (PB) and Mega Millions (MM) tickets from 2002 to 2021. Then, we complement this data with information at both the business and owner levels from Public Records. Crucially, the proceeds of this grant will allow us to acquire credit bureau data at the retailer and owner levels.

This empirical setting offers us a representative sample in the retail trade industry. Our small businesses are geographically diverse and cover various types of retailers. Moreover, the retail industry is a nontrivial proportion of small businesses, accounting for around 13% of the total small firms (SUSB) and is ranked second in the list of industries for entrepreneurs (Lazear (2004)).

Our paper bridges two strands of the literature that separately study the decision-making of entrepreneurs (e.g., Holtz-Eakin et al. (1994), Blanchflower and Oswald (1998), Hamilton (2000), Jensen et al. (2004), Andersen and Nielsen (2012), Bellon et al. (2019), and Barrot and Nanda (2020) and small businesses (e.g., De Mel et al. (2008), Karlan et al. (2015), and McKenzie (2017)). The main contribution of this project is that we will shed light on how the businesses and owners' finance are connected. This topic is of interest since small business owners are not well-diversified and typically hold much of their wealth in their own businesses and depend on their firms for their labor incomes.

Our paper is also related to recent studies that have conducted surveys of small businesses and their owners in the early phases of the Covid-19 crisis (e.g., Bartik et al. (2020); Bartlett III and Morse (2020); Humphries et al. (2020), Kim et al. (2020)). We differ from these papers by providing novel evidence on how small businesses' and owners' balance sheets interrelate and how these effects change in different states of the economy. Finally, this project is related to Cepedes et al. (2021), which studies windfalls' impact on small business growth. Our project will add to the literature by providing novel evidence of owners' and businesses' financing decisions.

Itemized Budget

- Data acquisition $63,000

Main data sources:

- Consumer and Small Business Credit Panel (Experian): our study goes from 2002 to 2021. We estimate the cost of each year to be $3,000.
- Public Records: the annual subscription to a service such as Lexis Nexis is around $3,000.

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ACADEMIC EMPLOYMENT

University of Minnesota - Carlson School of Management. *Minneapolis, MN*
Assistant Professor of Finance, July 2018-Present (Maternity leave 2020)

EDUCATION

The University of Texas at Austin - McCombs School of Business. *Austin, TX*
Ph.D. in Finance, 2018

The University of Texas at Austin - McCombs School of Business. *Austin, TX*
M.S. in Finance, 2014

Instituto de Estudios Superiores de Administracion (IESA). *Caracas, Venezuela*
M.B.A, 2007 (Highest Honors)

Universidad de Carabobo. *Valencia, Venezuela*
B.A. in Economics, 2005 (Valedictorian)

RESEARCH INTERESTS

Household Finance, Financial Intermediation, FinTech, Corporate Finance

WORKING PAPERS

The "Jackpot" Question: How Do Cash Windfalls Affect Small Business Growth? (R&R at RFS) with Xing Huang and Carlos Parra

The Effect of Principal Reduction on Household Distress: Evidence from Mortgage Cramdown (R&R at RFS) with Carlos Parra and Clemens Sialm

Heterogeneous Sensitivities to Interest Rate Changes: Evidence from Consumer Loans

Almost Famous: The Short- and Long-Term Effects of Wealth Shocks on Career Decisions with Zack Liu and Carlos Parra

Strategically Staying Small: Regulatory Avoidance and the CRA with Jordan Nickerson and Carlos Parra

Peer Effects Across Firms: Evidence from Security Analysts with Carlos Parra

PRESENTATIONS

2021: CEPR European Workshop on Household Finance*, New York Fed / NYU Stern Conference on Financial Intermediation, University of Connecticut Finance Conference, Consumer Financial Protection Bureau Research Conference, Community Banking in the 21st Century Research Conference, Financial Intermediation Research Society Conference, Northern Finance Association, AREUEA, Australasian Finance and Banking Conference, Consumer Financial Protection Bureau.

2020: Harvard Business School, London Business School, MFA*, EALE/SOLE/AASLE World Conference*, UAB Personal Finance Symposium*, Finance in the Cloud I*, European Meeting of the Labor and Finance Group*, CEPR Household Finance Seminar Series, Virtual Real Estate Seminar, Minnesota Corporate Finance Conference, Labor and Finance Group (cancelled), FIRS (cancelled), Showcasing Women in Finance (cancelled), UConn Finance Conference (cancelled), IZA Junior/Senior Symposium (cancelled)

2019: NBER SI (Entrepreneurship), Conference on Household Finance at NYU, FIRS, Northeastern Finance Conference, NFA*, ECWFC meeting at the WFA, 16th Finance UC Conference*, Showcasing Women in Finance (EU)*, Minnesota Junior Conference, UT Dallas Finance Conference*, PUC-Chile, Universidad Adolfo Ibanez, HKUST Finance Symposium (cancelled)

2018: Baruch College, BI Norwegian Business School, Bocconi University, CICF**, College of William & Mary, FED Board, FMA, ITAM, McGill University, MFA*, Nova SBE, PUC-Chile, Purdue University, Showcasing Women in Finance, SMU, Universidad de los Andes-Chile, University of Georgia, University of Houston, University of Minnesota

2017: EFA, Colorado Finance Summit (Ph.D. Session), Corporate Finance Conference at Washington University in St. Louis (Ph.D. Poster Session), SOLE*, FMA Ph.D. Paper Presentation Session and Doctoral Student Consortium, Trans-Atlantic Doctoral Conference at London Business School, Whitebox Advisors Graduate Student Conference, AFA Ph.D. Poster Session

2016: Trans-Atlantic Doctoral Conference at London Business School

2015: Annual IZA European Summer School in Labor Economics

(*presented by co-author) (**discussant)

HONORS AND AWARDS

Household Finance Small Grants Program, NBER, 2020

Business Week Faculty of the Year Award, University of Minnesota, 2020

Best Paper Award, FMA Annual Meeting, Semi-finalist, 2018

WFA-CFAR Award in Honor of Prof. Stuart I. Greenbaum, Washington University in St. Louis 2017

DSG Tuition Scholarship, University of Texas, 2016

Professional Development Award, University of Texas, 2016

Bonham Eugene & Dora Mem Fund, University of Texas, 2015

Ph.D. Fellowship Scholarship, University of Texas, 2012-2017

Heinz Award, IESA, 2007

Dean's Award, Universidad de Carabobo, 2005

TEACHING

Instructor: Finance Fundamentals, Spring 2019-2022

Overall Evaluation: 5.5/6.0

Investment Management, Summer 2015

Overall Evaluation: 4.2/5.0

ADDITIONAL INFORMATION

Languages: Spanish (native), English (fluent)

Computing Skills: Stata, MATLAB, Python

PERSONAL INFORMATION

I am married with one child, born September 2020

January 2022

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ACADEMIC EMPLOYMENT

Pontifical Catholic University of Chile (PUC-Chile), School of Management.
Assistant Professor of Finance (2019 - present)

Instituto Tecnológico Autónomo de México (ITAM), Business School.
Assistant Professor of Finance (2016 - 2018)

EDUCATION

The University of Texas at Austin, McCombs School of Business. Austin, TX.
Ph.D. in Finance, 2016

Instituto de Estudios Superiores de Administración (IESA). Caracas, Venezuela.
M.S. in Finance, 2007 (Highest Honors)
M.B.A., 2006 (Highest Honors)

Universidad de Carabobo. Valencia, Venezuela.
B.A. in Economics, 2004

RESEARCH INTERESTS

Corporate Finance, Household Finance, Financial Intermediation.

WORKING PAPERS

The Effect of Principal Reduction on Household Distress: Evidence from Mortgage Cramdown (with Jacelly Cespedes and Clemens Sialm R&R at the RFS)

More Money, More Options? The Effect of Cash Windfalls on Entrepreneurial Activities in Small Businesses (with Jacelly Cespedes and Xing Huang R&R at the RFS)

Strategically Staying Small: Regulatory Avoidance and the CRA (with Jacelly Cespedes and Jordan Nickerson)

Capital Mobility and Regulation Frictions: Evidence from U.S. Lottery Winners

How Does Consumer Bankruptcy Protection Impact Household Outcomes?

Almost Famous: The Short- and Long-Term Effects of Wealth Shocks on Career Decisions (with Jacelly Cespedes and Zack Liu)

Peer Effects across Firms: Evidence from Security Analysts (with Jacelly Cespedes)

AWARDS

NBER/Sloan Foundation Household Finance Small Grants Program, 2020.

Best Paper Award, FMA Annual Meeting, Semi-finalist, 2018

PhD Paper Award in Honor of Stuart Greenbaum, Olin Business School, Washington University in St. Louis, 2015.

Finance Department Nomination for Fred Moore Assistant Instructor Award, 2015.

Travel Grant, European Economic Association, 2015.

Ph.D. Fellowship Scholarship, University of Texas at Austin, 2010-2015.

PricewaterhouseCoopers Award, IESA, 2007.

Heinz Award, IESA, 2006.

Dean's Award, Universidad de Carabobo, 2004.

Graduate Fellowship, Gran Mariscal Ayacucho, 2003.

CONFERENCE PRESENTATIONS

2022: ASSA-AREUEA, Midwest Finance Association (scheduled).

2021: CEPR European Workshop on Household Finance, New York Fed / NYU Stern Conference on Financial Intermediation*, University of Connecticut Finance Conference, Consumer Financial Protection Bureau Research Conference, Community Banking in the 21st Century Research Conference, Financial Intermediation Research Society Conference*, Northern Finance Association*, AREUEA, Australasian Finance and Banking Conference*.

2020: Finance in the Cloud I*, European conference of the Labor and Finance Group*, Midwest Finance Association*, CEPR Household Finance Seminar Series*, EALE/SOLE/AASLE World Conference, UAB Personal Finance Symposium, Virtual Real Estate Seminar*, Minnesota Corporate Finance Conference*. Cancelled due to COVID-19: Financial Intermediation Research Society Conference, Labor and Finance Group, University of Connecticut Finance Conference, IZA Junior/Senior Symposium.

2019: NBER Summer Institute (Entrepreneurship)*, Northeastern Finance Conference*, NYU Conference on Household Finance*, UTD Finance Conference*, Northern Finance Association*, Community Banking in the 21st Century Research Conference, PUC International Conference, University of Minnesota Junior Conference*, Showcasing Women in Finance*, HKUST Finance Symposium (cancelled).

2018: Western Finance Association, Midwest Finance Association, FMA Annual Meeting*.

2017: ASSA-AREUEA, Society of Labor Economics Annual Meeting, FMA Latin American Conference.

2016: Finance Research Association Annual Meeting, Financial Intermediation Research Society Conference, Indian School of Business CAF Summer Research Conference, Boulder Summer Conference on Consumer Financial Decision Making, American Law and Economics Association Meeting, Annual Conference on Empirical Legal Studies.

2015: European Economic Association, IZA European Summer School in Labor Economics*, LBS Transatlantic Doctoral Conference, Olin Corporate Finance Conference (poster session).

* Presentation by co-author.

DISCUSSIONS

PUC International Conference, 2019
China International Conference in Finance (CICF), 2018
FMA Latin American Conference, 2017
American Law and Economics Association Meeting (2x), 2016
Annual Conference on Empirical Legal Studies, 2016
LBS Transatlantic Doctoral Conference, 2015

TEACHING EXPERIENCE

Instructor, Corporate Finance, PUC Chile.

Instructor, Corporate Finance, ITAM.

Instructor, Business Finance (Summer 2013), University of Texas at Austin.

Teaching Assistant (2010-2016), University of Texas at Austin.

ADDITIONAL INFORMATION

Languages: English (fluent), Spanish (native).
Computing Skills: MATLAB, Python, Stata.
Citizenship: Venezuela (U.S. Permanent Resident).
Married with one child.

MEDIA COVERAGE

Capital Mobility and Regulation Frictions: Evidence from U.S. Lottery Winners

Fox Business, National Affairs, Dawn, Gestion.

REFERENCES

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